

REMARKS

This Amendment is responsive to the Office Action identified above, and is further responsive in any other manner indicated below.

ABSTRACT OBJECTIONS - ABSTRACT AMENDED

The Abstract was objected to because of the Office Action concerns listed at Item 3 on page 2 of the Office Action. As the Abstract has been amended to overcome the objections and is believed to be of proper form, reconsideration and withdrawal of the objections to the abstract are respectfully requested.

DRAWING AMENDMENTS/REPLACEMENT DRAWINGS

Submitted herewith is a "Replacement Sheet" of formal drawing for Figure 1 which has been minorly clarified to better illustrate the WWW terminal 110. No new matter is added, and no further consideration is required. Acknowledgment and approval of the attached Replacement Sheet are respectfully requested to be provided in the next Communication regarding the present application.

DRAWING OBJECTIONS/SPECIFICATION ADJUSTED

With regard to Item 4 on page 3 of the Office Action, appropriate locations of Applicant's specification have been amended to include mention of the previously unmentioned reference numeral(s). As the above is believed to obviate all the listed concerns, reconsideration and withdrawal of the objections to the drawings are respectfully requested.

SPECIFICATION AMENDMENTS

At Item 5 on page 3 of the Office Action, the specification is amended where appropriate in order to the Office Action listed concern. Additionally, any spelling, idiomatic, grammatical and/or other informality noted during review of the disclosure/specification also have been corrected. In view of the foregoing, reconsideration and withdrawal of the objection to the disclosure/specification are respectfully requested.

PENDING CLAIMS

Claims 1-6 were pending in the application, under consideration and subject to examination at the time of the Office Action. Unrelated to any prior art, scope or rejection, appropriate claims have been amended, added or deleted (without prejudice or disclaimer of any scope or subject matter) in order to adjust a clarity and/or focus of Applicant's claimed invention. That is, the amendments to the claims are unrelated to any prior art or scope adjustment, and are simply clarified claims in which Applicant is presently interested. At entry of this paper, Claims 7-20 now are pending in the application for consideration and examination.

REJECTION UNDER 35 USC §102 - OBVIATED/CLAIMS CANCELLED

The rejection of Claims 1-6 under 35 USC §102 rejection as being anticipated by Goldszmidt *et al.* (US 6,195,680 B1) is respectfully traversed. Such rejection has been rendered obsolete by the cancellation of all of the rejected claims, and accordingly, traversal arguments are not appropriate at this time. However,

Applicant respectfully submits the following to preclude renewal of any such rejection against Applicant's new and clarified claims.

All descriptions of Applicants disclosed and claimed invention, and all descriptions and rebuttal arguments regarding the applied prior art, as previously submitted by Applicant in any form, are repeated and incorporated herein by reference. Further, all Office Action statements regarding the prior art rejections are respectfully traversed.

To reiterate, the requirements to support a rejection under 35 USC §102 as indicated in the decision of *In re Robertson*, 49 USPQ2d 1949 (Fed. Cir. 1999), require that each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. However, the cited prior art does not adequately support either a §102 anticipation-type rejection or a §103 obviousness-type rejection because it does not, at minimum, disclose (or suggest) the following limitations of Applicant's clarified claims

Applicant's disclosed and claimed invention is directed to storage operating control system embodiments which (as described on Applicant's specification page 7, second full paragraph) provide the advantages of both "in-band" and "out-of-band" approaches. In order to accomplish the same, Applicant's disclosed and claimed invention includes a specific combination of components and couplings, *i.e.*, (independent Claim 7; FIG. 1) an external storage device 108 having storage data 105 and storage operating data 107 and a service processor 106 for operating said storage operating data; a host computer 101 coupled with said external storage device via a first connection 103 so as to read/write said storage data from/to said

external storage device; and a storage management server 113 coupled with said host computer 101 via a second connection 109 and said service processor 106 via a third connection 1116-117. Further, Applicant's storage management server 113 executes a storage operating data server program 114, and Applicant's host computer 101 executes an application program 102 associated with said storage operating data server program so as to read/write said storage operating data 107. Other ones of Applicant's dependent claims by dependency, and other ones of Applicant's claims contain similar features/limitations.

Turning now to rebuttal of the applied reference, Goldszmidt *et al.* is directed to nothing more than servers containing duplicate (redundant) data and client-based dynamic switching of streaming servers for fault-tolerance and load balancing. More particularly, Goldszmidt *et al.*'s FIGS. 1a-b, 2a-c and 3a-c show duplicate server clusters 1.2 and 1.3, and dynamic switching from cluster 1.2 to 1.3 upon a fault. Nowhere does Goldszmidt *et al.*'s disclosure disclose or suggest applicant's storage operating data server program and application program operating in conjunction with combination components/couplings as recited/claimed by Applicant. In short, Goldszmidt *et al.* is directed toward nothing more than redundancy switching for fault tolerance.

Additionally, the following remarks are submitted by Applicant's foreign representative in support of traversal of the rejection and patentability of Applicant's claims.

As is apparent from the clarified claims, according to the present invention, there are provided two (2) routes for accessing to the storage operation data of the

(external) memory device. Thus, for the purpose of providing those two (2) routes, the storage operating data is read out, into the storage operating server (see the upper description on page 6 of the specification).

Thus, the first (1ST) one is a route, starting from the storage operating terminal 111 via the storage management server, thereby accessing to the data on the storage operating server irrespective of the host computer (a first route); and the second (2ND) one is a route of accessing the data on the storage operating server from the host computer computer (a second route).

Where the data are to be accessed are common (not separate but independent). Thus, it does not mean that two of the same data exit at the same time.

Hereinafter, explanation will be given about the second route. The host computer is able to know the operating data of the storage apparatus, through reading out the storage operating data, which are read out onto the storage operating server. Also, the host computer operates (*i.e.*, writes in) the storage operating data, which are read out from the storage apparatus onto that storage operating server. The storage operating data within the storage operating server, which are operated from the host computer in this manner, are transmitted by the storage operating server through the service processor to the (external) memory device, as the storage operating data. With this, it is possible to renew the storage operating data on the (external) memory device from the host computer. And, with this, as is shown in Fig. 4, for example, for the host computer, it is possible to execute the control upon the functions of the external memory device, such as, a

move instruction of the volume, etc., in relation to or linking with the operation of the application which is executed by itself (the host-computer).

In other words, it can be said that, in particular, via the second route, the host computer can also execute the control upon the (external) memory device, in addition to the execution of the application on itself, through host-linking the application executed by itself and the storage operating data server program on the storage operating server.

Goldszmidt *et al.*, which is cited by the Examiner, discloses provision of two (2) data I/F routes from the streaming data server which are separated into two (2) clusters, thereby obtaining the streaming data through a route, which is alternated (or is controlled, dynamically). In this case, the respective (*i.e.*, duplicate) data exist on each of the clusters.

However, in the cited reference, there is no such the program on the storage operating server, *i.e.*, comparable to Applicant's storage operating data server program 114.

Thus, the cited reference clearly fails to disclose and/or show such two (2) routes to access the data on the storage operating server, as was mentioned hereinabove.

Additionally, contrary to the teaching of the reference, according to the present invention, the storage operating server causes the service processor to process the data transmission from the operation terminals even under the condition that the host computer does not start, thereby enabling renewal on the storage operating data (*i.e.*, configuration information) within the (external) storage device.

As apparent from the above, the present invention as defined by the clarified claims now pending, is novel and is not obvious from the applied art, therefore, the claim rejection is traversed and should be withdrawn.

As a result of all of the foregoing, it is respectfully submitted that the applied art would not support a §102 anticipation-type rejection of Applicant's clarified claims. Accordingly, reconsideration and withdrawal of such §102 rejection, and express written allowance of all of the rejected claims, are respectfully requested.

RESERVATION OF RIGHTS

It is respectfully submitted that any and all claim amendments and/or cancellations submitted within this paper and throughout prosecution of the present application are without prejudice or disclaimer of any scope or subject matter. Further, Applicant respectfully reserves all rights to file subsequent related application(s) (including reissue applications) directed to any/all previously claimed limitations/features which have been subsequently amended or cancelled, or to any/all limitations/features not yet claimed, *i.e.*, Applicant continues (indefinitely) to maintain no intention or desire to dedicate or surrender any limitations/features of subject matter of the present application to the public.

EXAMINER INVITED TO TELEPHONE

The Examiner is invited to telephone the undersigned at the local D.C. area number 703-312-6600, to discuss an Examiner's Amendment or other suggested action for accelerating prosecution and moving the present application to allowance.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims listed above as presently being under consideration in the application are in condition for allowance. Accordingly, early allowance of such claims is respectfully requested.

A Petition for an extension of the shortened statutory period for response set by the 18 June 2004 Office Action is submitted herewith, along with a Form PTO-2038 authorizing payment of the Petition fee. To whatever other extent is actually required, Applicant respectfully petitions the Commissioner for an extension of time under 37 CFR §1.136. No additional claims fees are required for entry of this paper. Please charge any actual fee deficiency to ATS&K Deposit Account No. 01-2135 (as Case No. 520.40043X00).

Respectfully submitted,



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Attachments:

Replacement Sheet - Figure 1
Petition for Extension of Time
PTO-2038 (Fee Code 1251)

IN THE DRAWINGS:

Attached hereto is a "REPLACEMENT SHEET" which corrects the illustration of the WWW terminal 110 in the flowchart of FIG. 1.